

AMENDMENTS TO THE CLAIMS

Claims 1-46. (Previously Cancelled)

Claim 47. (Currently Cancelled)

Claim 48. (Previously Cancelled)

Claim 49. (Previously Amended) A method of generating a male sterile plant characterized by exogenic allelism in a plant, the method comprising the steps of:

- (a) providing a first plant and a second plant each including an expression cassette in the same chromosomal location, said expression cassette comprising:
 - (i) a first segment comprising a first transcribable polynucleotide sequence, said first transcribable polynucleotide sequence being operatively linked to a first promoter sequence, said first segment being flanked by a pair of first site-specific recombination sequences; and
 - (ii) a second segment, being linked to said first segment, said second segment comprising a second transcribable polynucleotide sequence, said second transcribable polynucleotide sequence being operatively linked to a second promoter sequence, said second segment being flanked by a pair of second site-specific recombination sequences;
- (b) introducing a first polynucleotide sequence encoding a recombinase into said first plant, or crossing said first plant with a plant that has been transformed with a polynucleotide sequence encoding the first recombinase, so as to excise said first segment, and selfing said first plant and selecting a progeny devoid of the first polynucleotide sequence encoding said first recombinase, wherein the progeny comprises the expression cassette in which the first segment has been excised;
- (c) introducing a second polynucleotide sequence encoding a recombinase into said second plant, or crossing said second plant with a plant that has been transformed with a polynucleotide sequence encoding the second recombinase, so as to excise said second segment, and selfing said second plant and selecting a progeny devoid of the second polynucleotide sequence encoding said second recombinase, wherein the progeny comprises the expression cassette in which the second segment has been excised; and
- (d) crossing a plant resulting from step (b) with a plant resulting from step (c), so as to generate an offspring characterized by exogenic allelism, wherein expression of

the first and the second transcribable polynucleotide sequences results in male sterility of the plant.

Claim 50. (Previously Cancelled)

Claim 51. (Previously Amended) A male sterile plant heterozygous for an expression cassette comprising:

(a) a first segment comprising a first transcribable polynucleotide sequence, said first transcribable polynucleotide sequence being operatively linked to a first promoter sequence, said first segment being flanked by a pair of first site-specific recombination sequences; and

(b) a second segment, being linked to said first segment, said second segment comprising a second transcribable polynucleotide sequence, said second transcribable polynucleotide sequence being operatively linked to a second promoter sequence, said second segment being flanked by a pair of second site-specific recombination sequences, said second transcribable polynucleotide sequence encoding a polypeptide or an RNA molecule capable of regulating an expression level of a product of said first transcribable polynucleotide sequence, wherein expression of the first and the second transcribable polynucleotide sequences results in male sterility of the plant.

Claims 52-57. (Previously Cancelled)

Claim 58. (Currently Cancelled)

Claim 59. (Previously Cancelled)

Claim 60. (Previously Presented) A plant or plant seed produced according to the method of claim 49, wherein the plant or the plant seed is characterized by exogenic allelism, and by a genome that lacks a polynucleotide sequence encoding an exogenic recombinase.

Claim 61. (Previously Cancelled)

Claim 62-70. (Currently Cancelled)

Claim 71. (Previously Amended) The method of claim 49, wherein the first transcribable polynucleotide sequence encodes a cytotoxic polypeptide or a cytostatic polypeptide.

Claim 72. (Previously Presented) The method of claim 71, wherein the polypeptide is pectate lyase, 1-3 β -glucanase, avidin, streptavidin, diphtheria toxin A-chain, URF13, indole acetic acid-lysine synthetase, CytA toxin, RNase-TI or Barnase.

Claim 73. (Previously Amended) The method of claim 49, wherein the first transcribable polynucleotide sequence encodes an antisense RNA molecule.

Claim 74. (Previously Amended) The method of claim 49, wherein the second transcribable polynucleotide sequence encodes an expression product that transactivates the expression of the first transcribable polynucleotide sequence.

Claim 75. (Previously Presented) The method of claim 74, wherein the expression product is a bacterial RNA polymerase or a bacteriophage RNA polymerase.

Claim 76. (Previously Presented) The method of claim 49, wherein the second promoter sequence is selected from a group consisting of constitutive promoters and induced promoters.

Claim 77. (Previously Presented) The method of claim 49, wherein the second promoter sequence is a tissue specific promoter.

Claim 78. (Previously Amended) The method of claim 49, wherein the first and the second exogenes encode expression products that assemble into a hetero-oligomeric protein.

Claim 79. (Previously Presented) The method according to claim 78, wherein the hetero-oligomeric protein is cytotoxic or cytostatic protein.